

Figure1. Insulin / glycine precipitated in 2-propanol

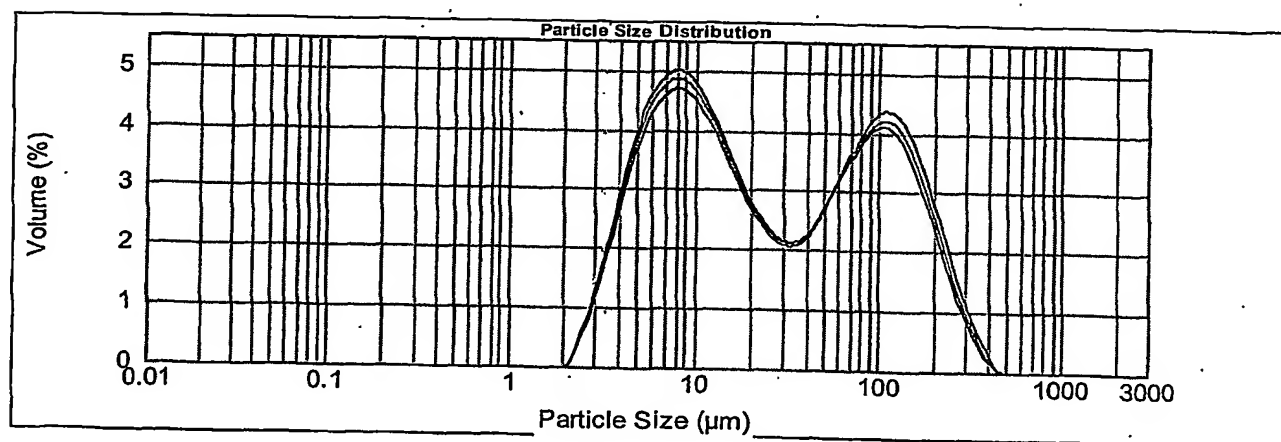


Figure2. chymotrypsin / alanine precipitated in 2-propanol

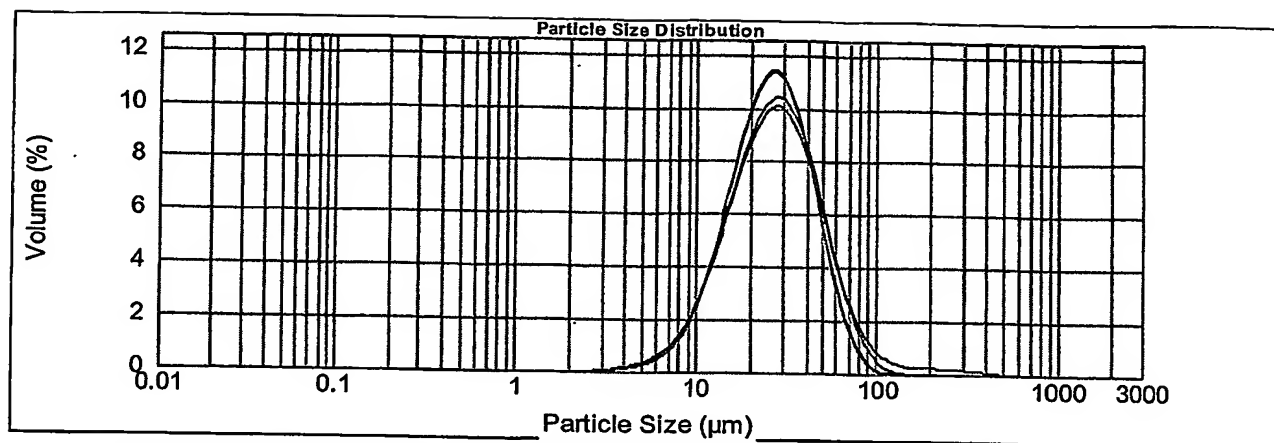


Figure 3. 15mg chymotrypsin was dissolved in 3ml of 50 %saturated DL valine solution. 6 ml of the aqueous solution was precipitated in 35 ml of DL valine saturated 2-propanol. The particles were dried using Millipore filtration system.

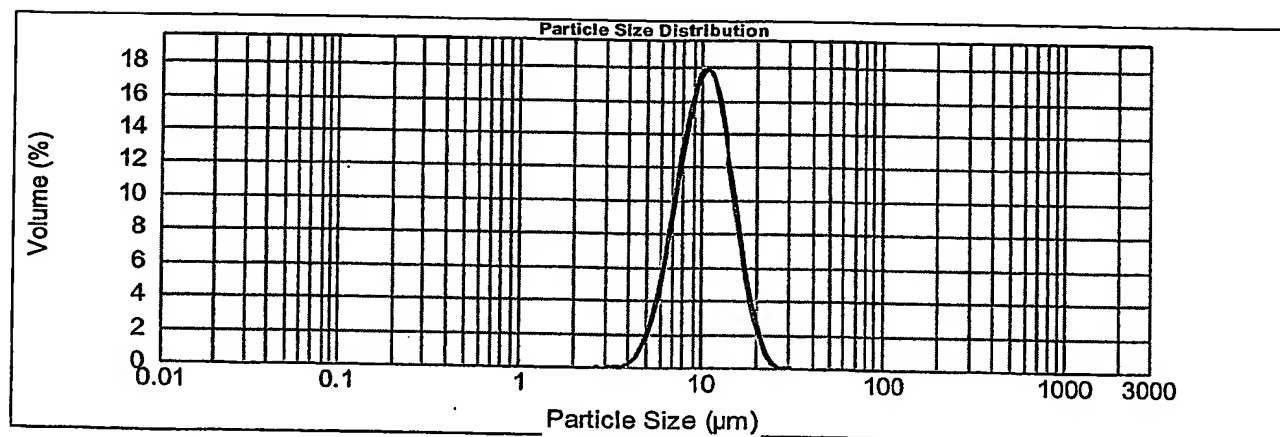


Figure 4. 0.2ml of saturated DL valine solution was precipitated in 60ml unsaturated 2-propanol using Hamilton syringe in mastersizer sample chamber, with a stirrer speed = 2000rpm. Particles formed inside Mastersizer and were directly measured.

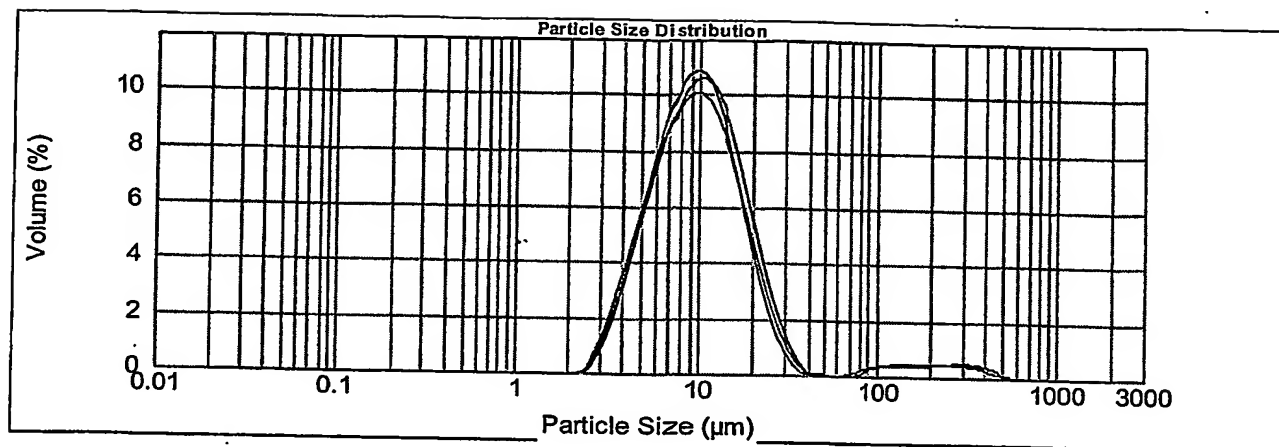


Figure 5.. insulin / L-histidine precipitated in 2-propanol

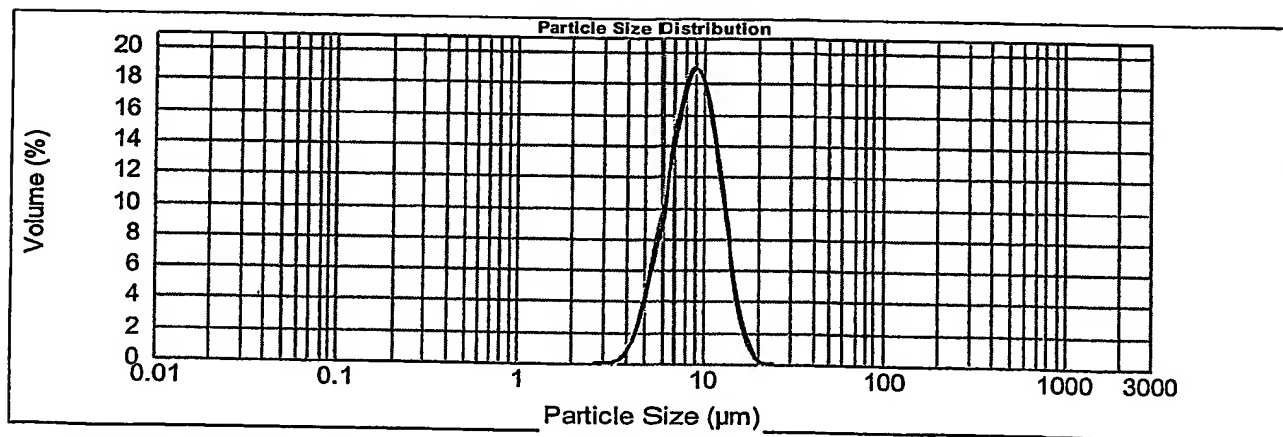


Figure 6. 0.2ml of saturated DL valine precipitated in 60ml unsaturated 2-propanol in mastersizer sample chamber, with a stirrer speed = 1500rpm. Particles formed inside Mastersizer and were directly measured.

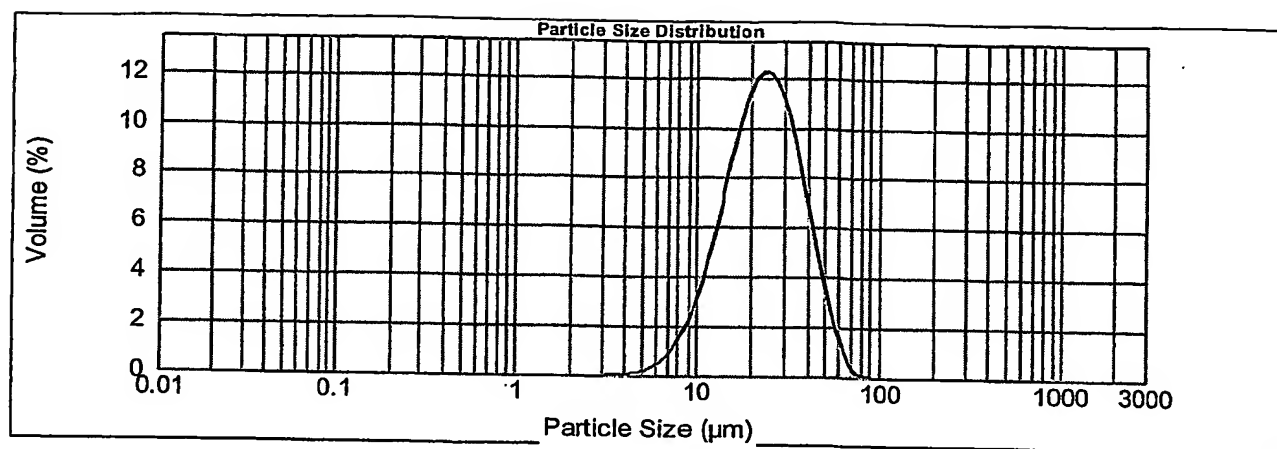


Figure 7. 0.6ml L-glutamine saturated solution precipitated in 6ml L-glutamine saturated 2-propanol solution using 5ml pipette under fast stirring. The particles were dried using Millipore filtration system.

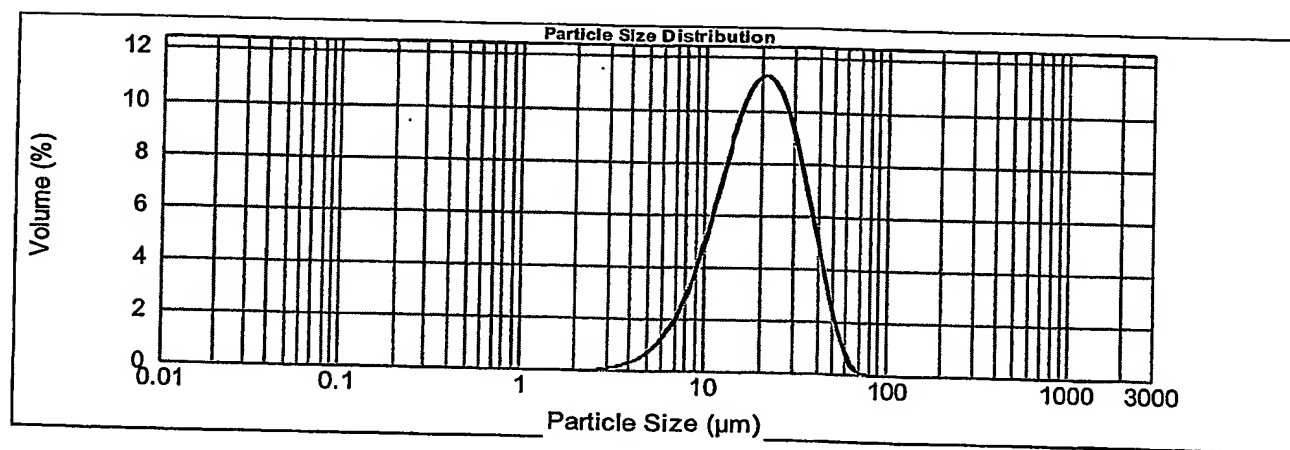


Figure 8. 0.6ml L-glutamine saturated solution precipitated in 6ml of L-glutamine saturated 2-propanol solution using small syringe pump under fast stirring. The particles were dried using Millipore filtration system.

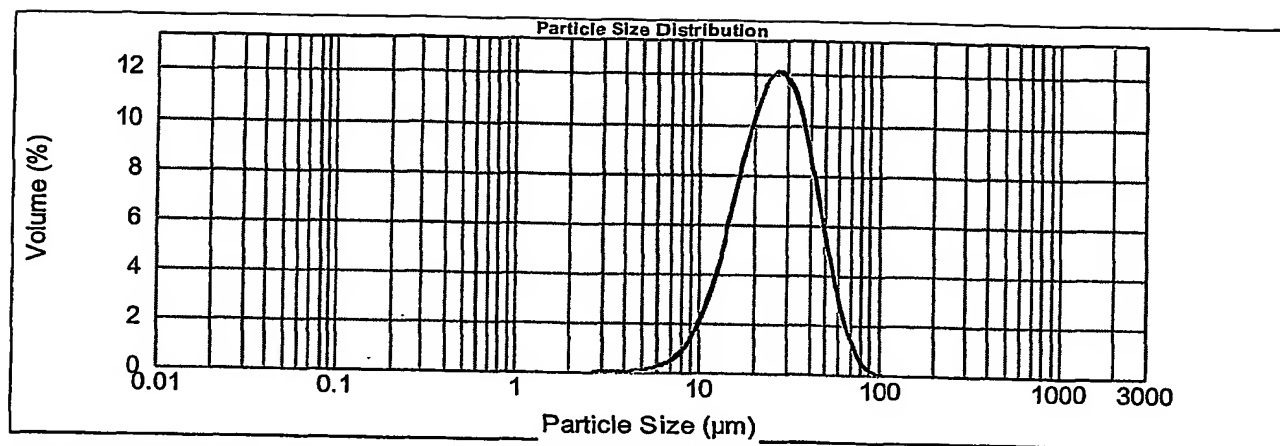


Figure 9.5% loading albumin /L-glutamine prec in 2-prop, medium stirring
1mg of albumin dissolved in 0.6ml L-glutamine saturated solution. 0.5ml of this solution was precipitated into 5ml 2-propanol saturated with L-glutamine using syringe pump under medium stirring. The particles were dried using Millipore filtration system.

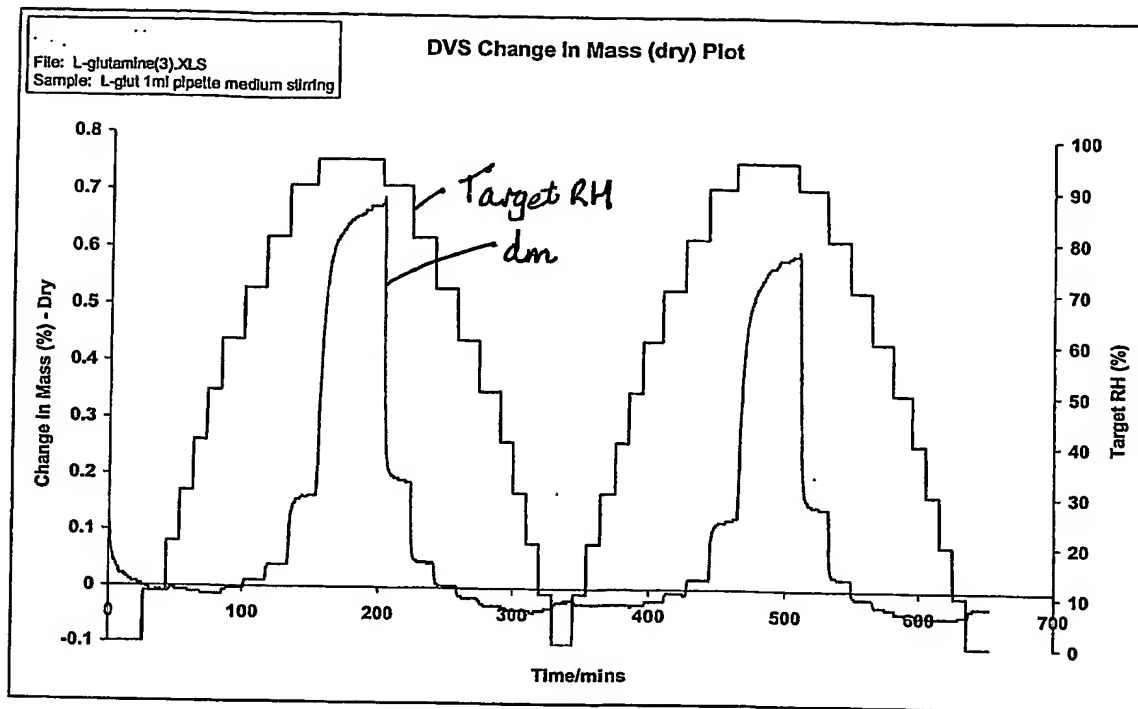


Figure 10

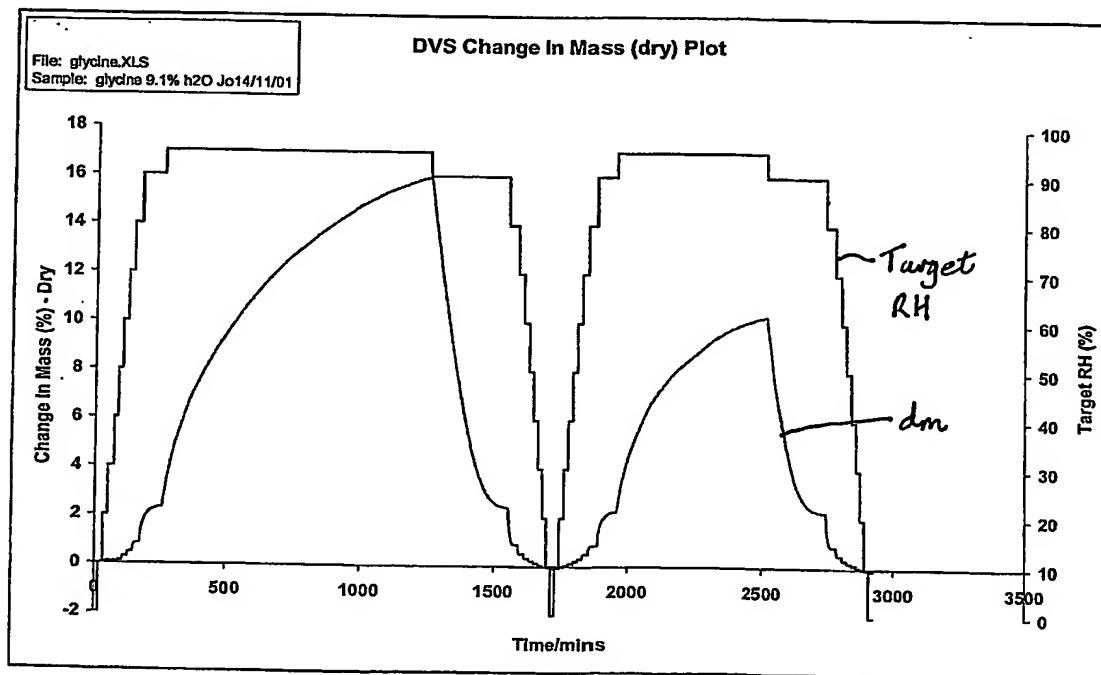


Figure 11

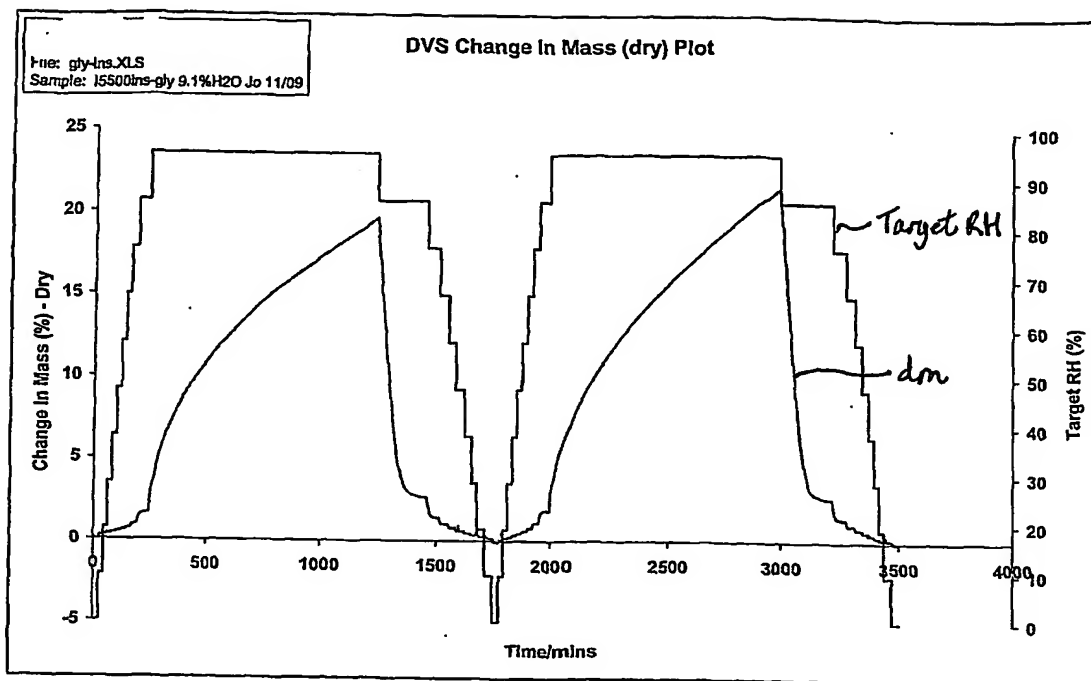


Figure 12

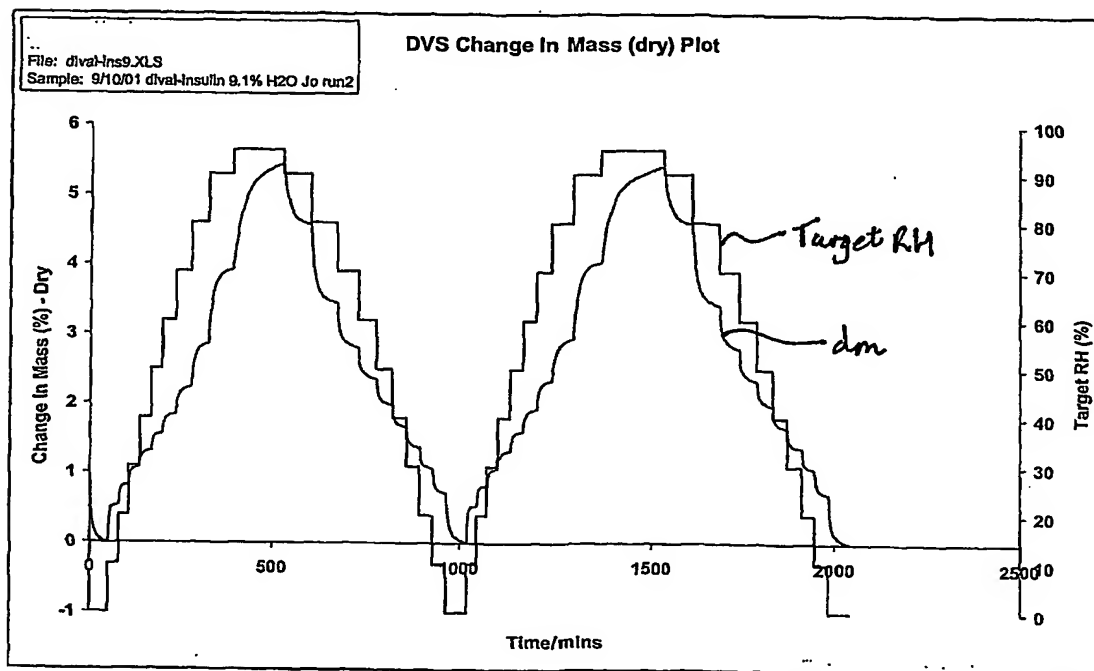


Figure 13

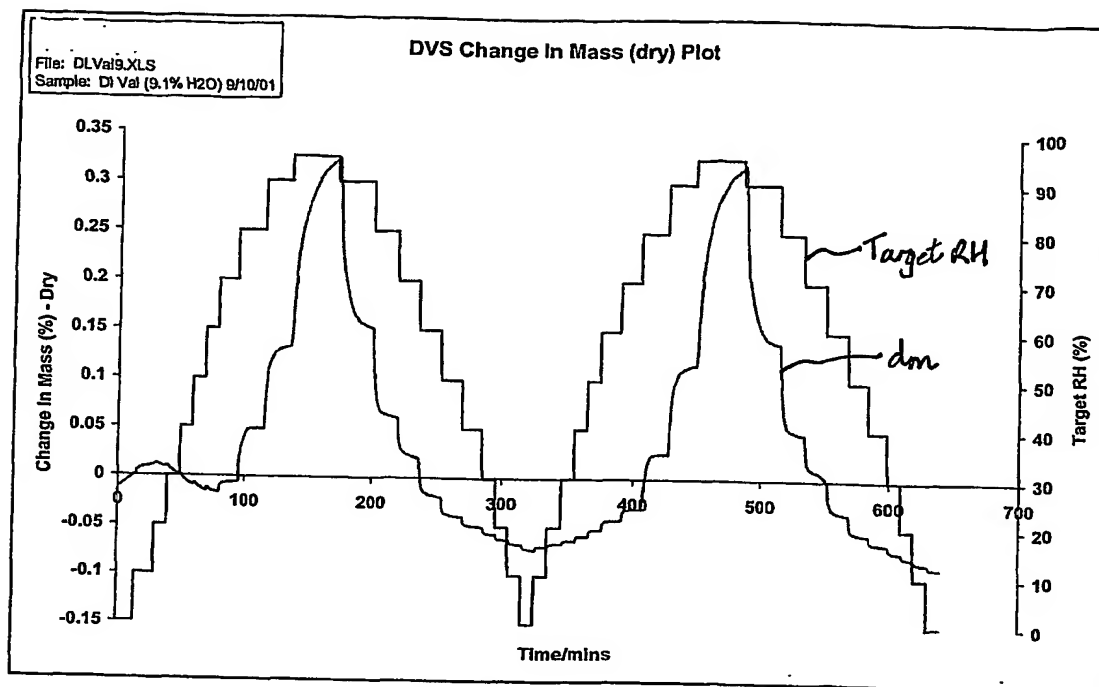


Figure 14

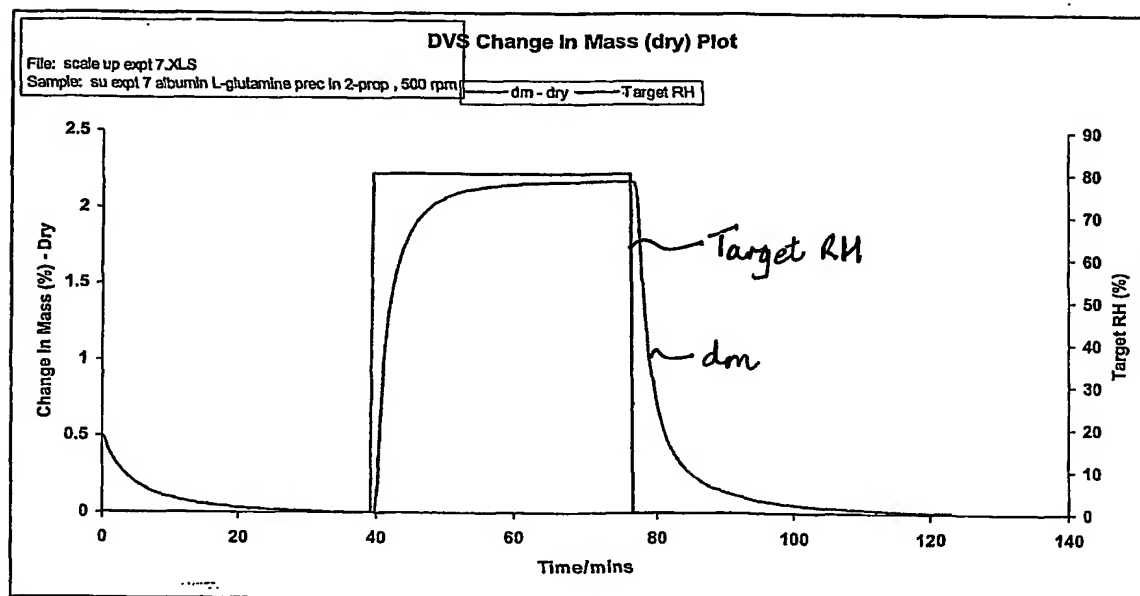


Figure 15

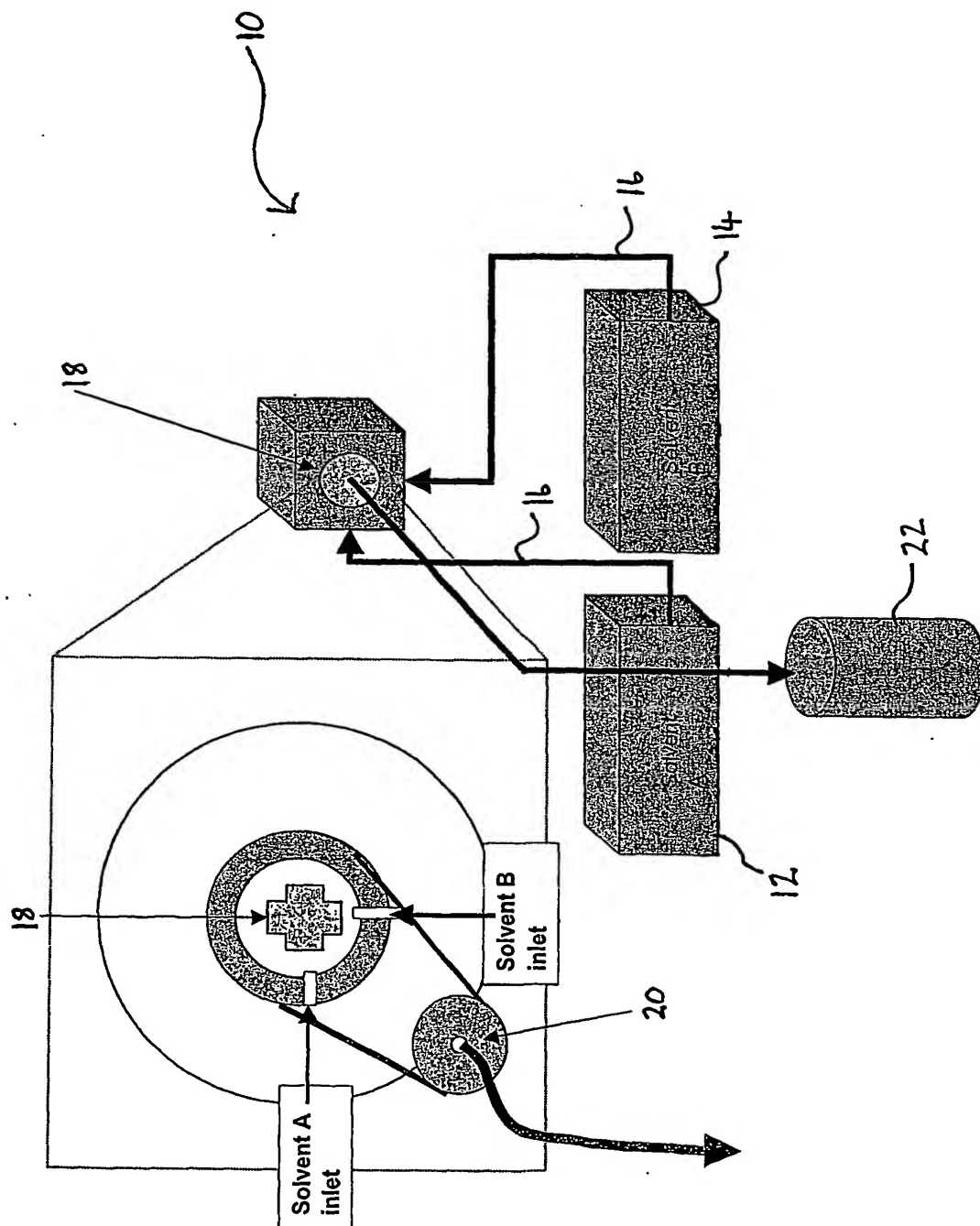
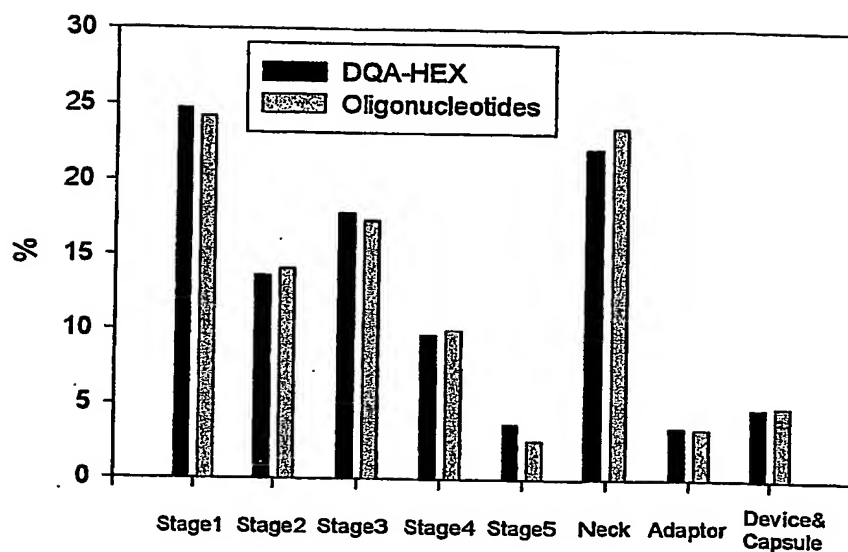


Figure 1b



Distribution of D,L valine crystals coated with a blend of DQA-HEX and crude oligonucleotides in the artificial lung. 2-PrOH was used as precipitating solvent. Loading was 18.4% (this was calculated as weight DNA measured by UV_{260nm} per weight OCMC). The fine particle fraction (FPF) was 29.9%.

Figure 17

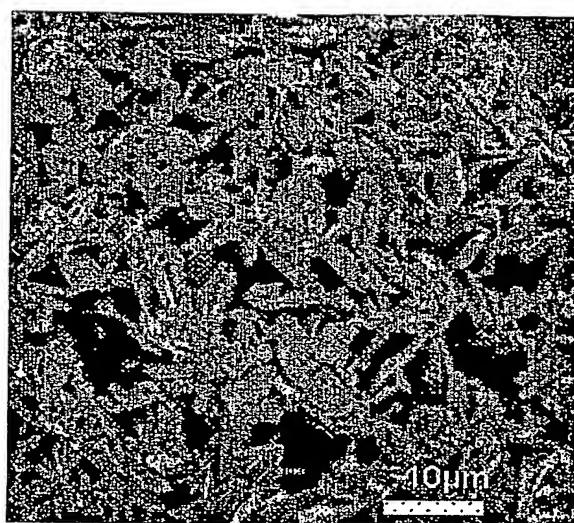


Figure 18

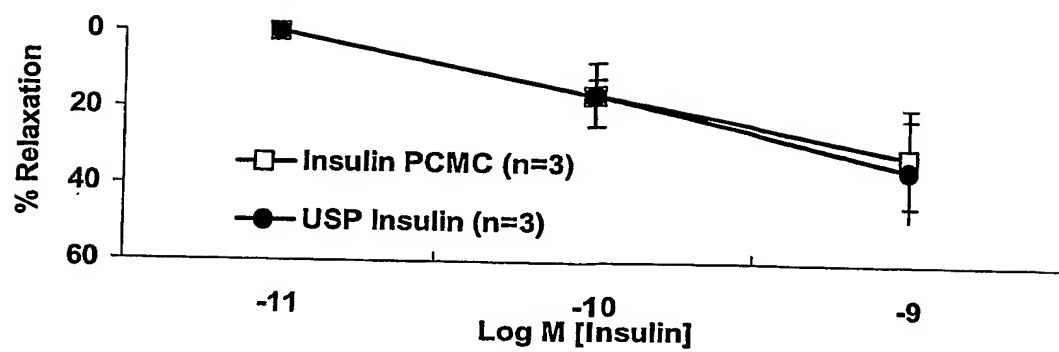


Figure 19

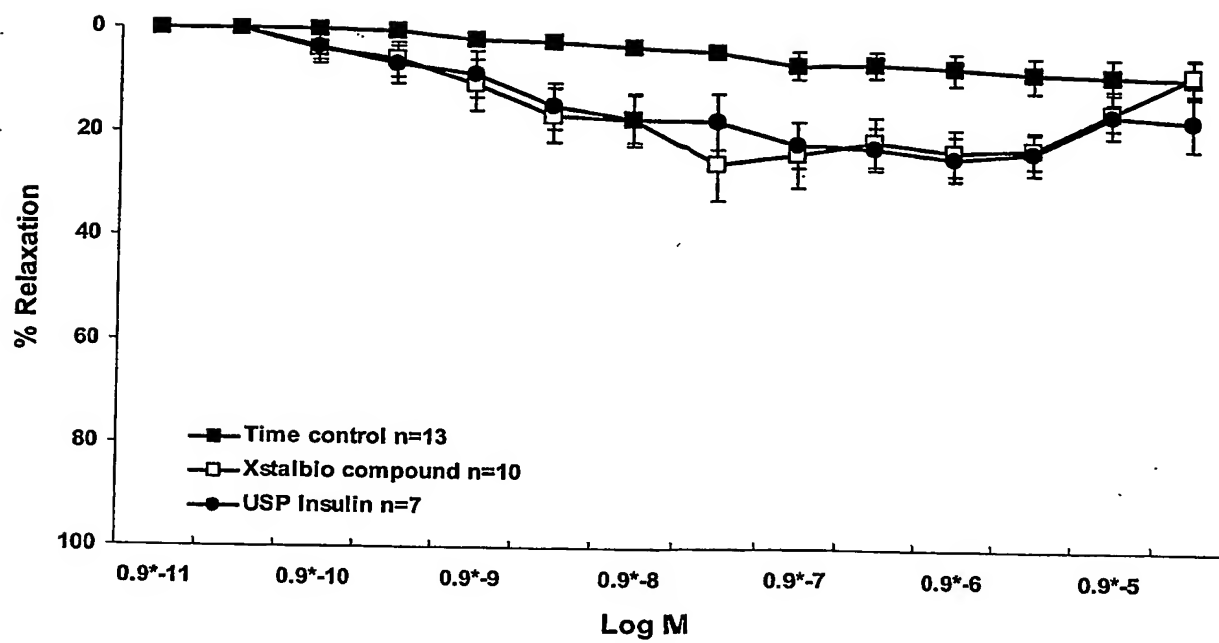


Figure 20

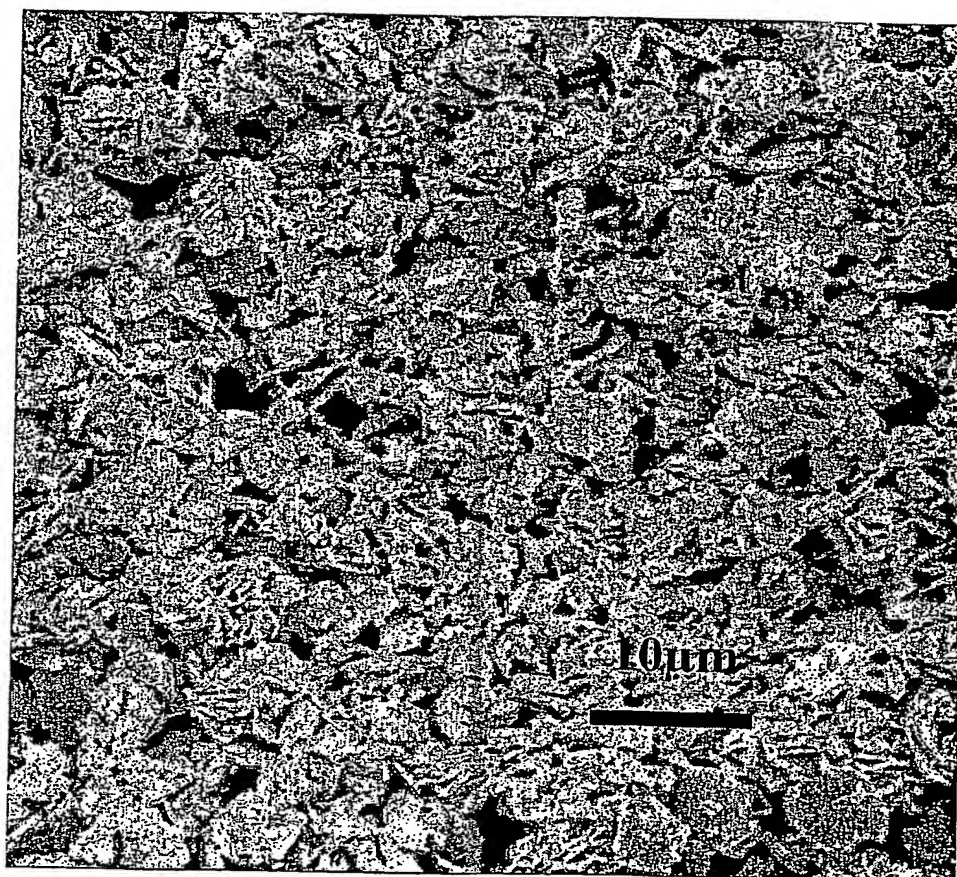


Figure 21

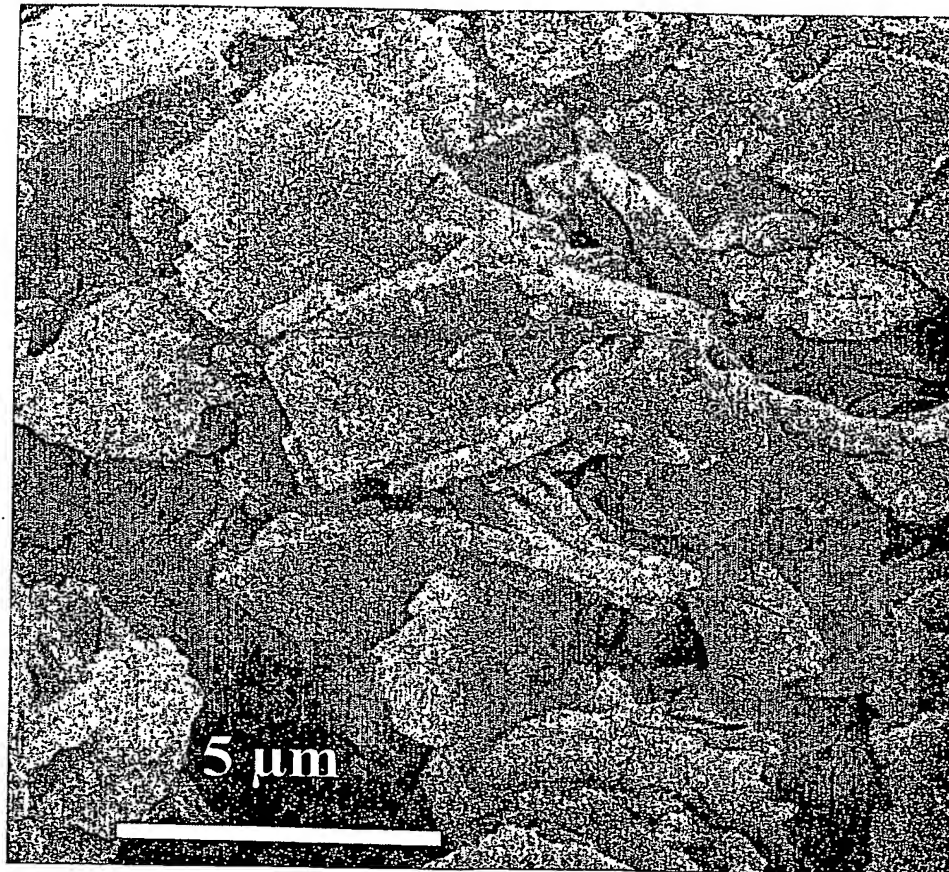


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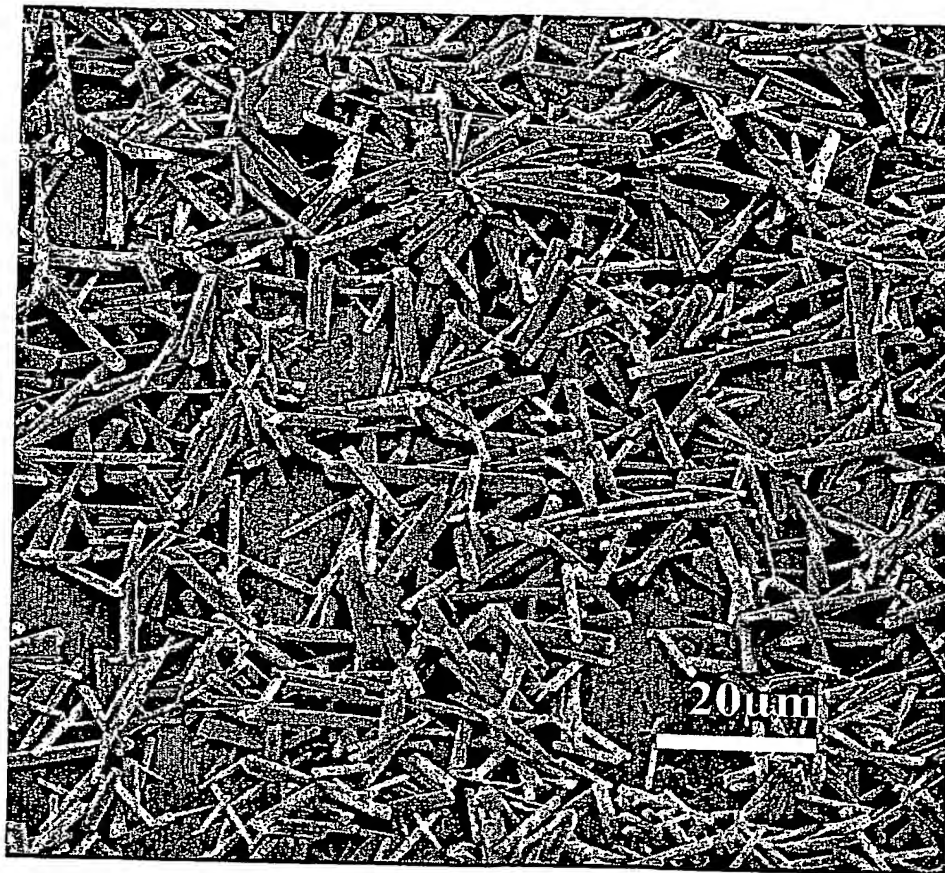


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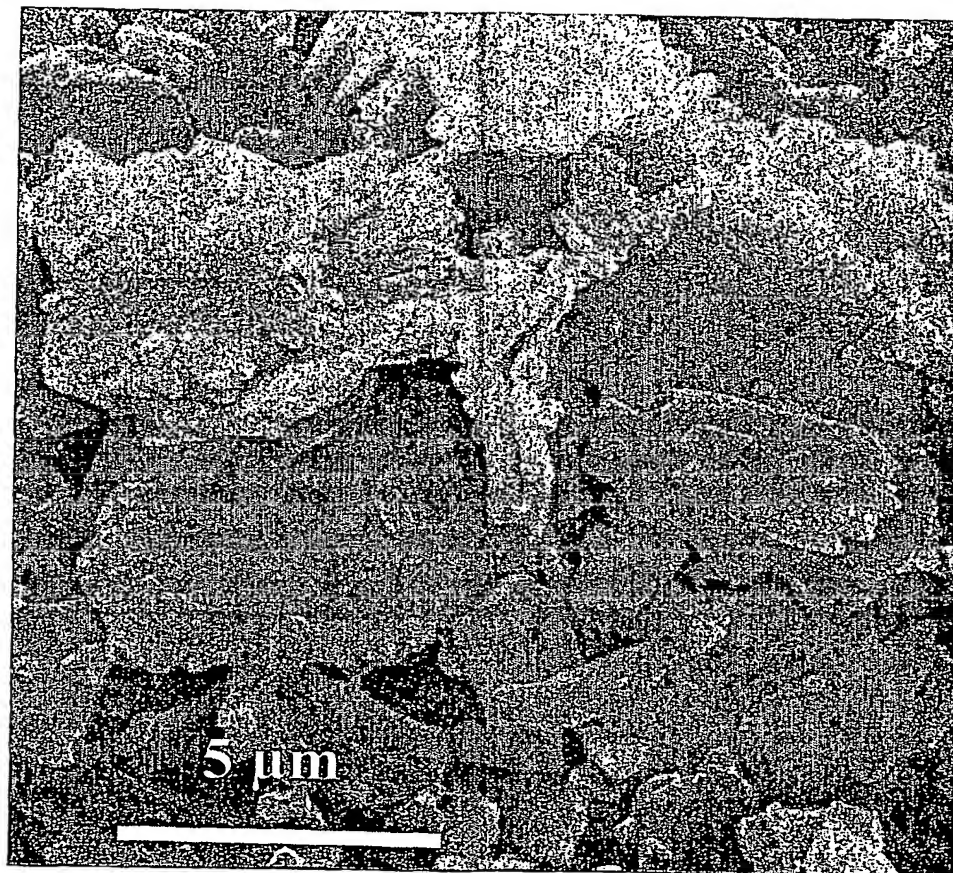


Figure 24

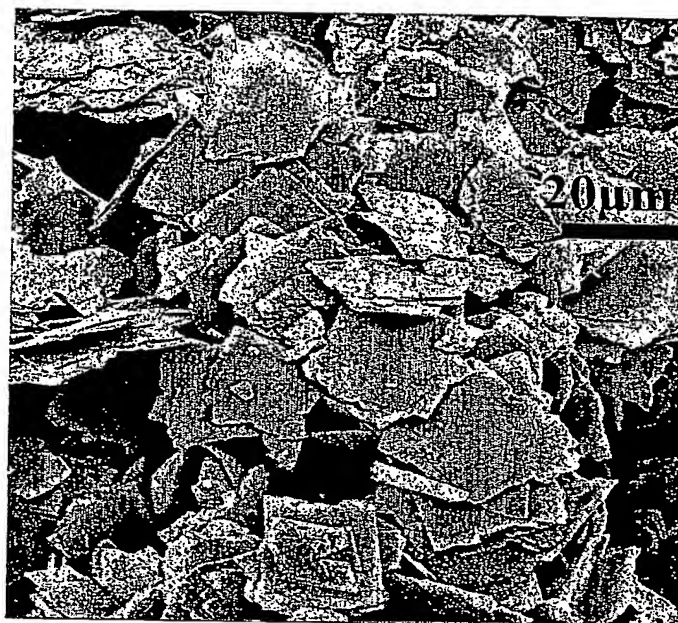
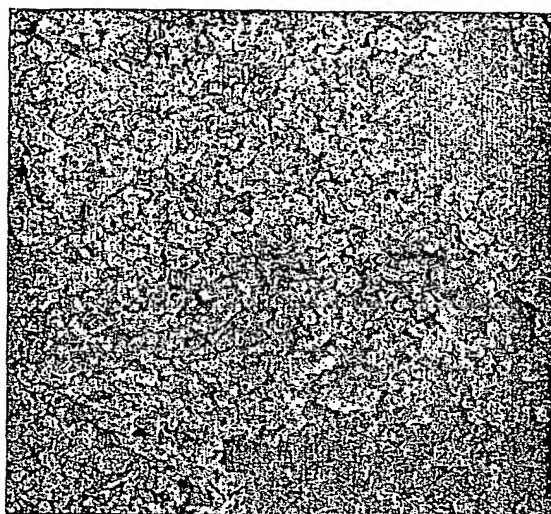


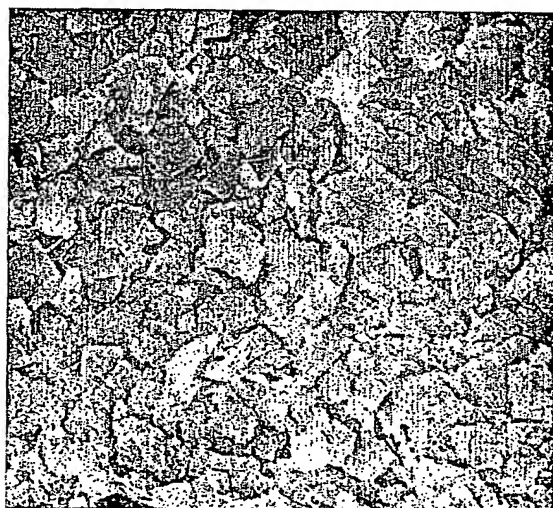
Figure 25



5μm



Figure 26



5μm



Figure 27

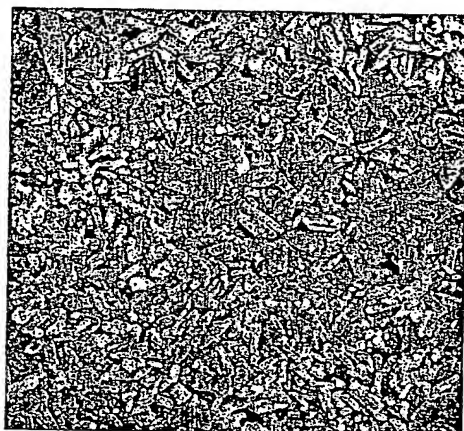


Figure 28

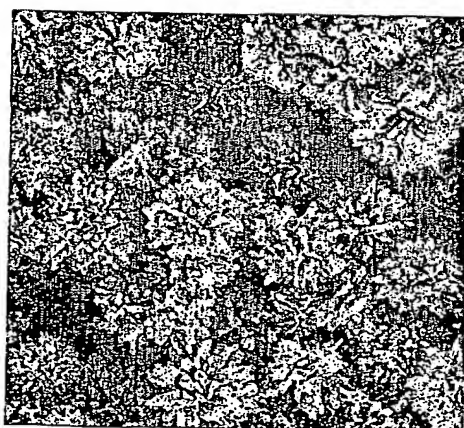


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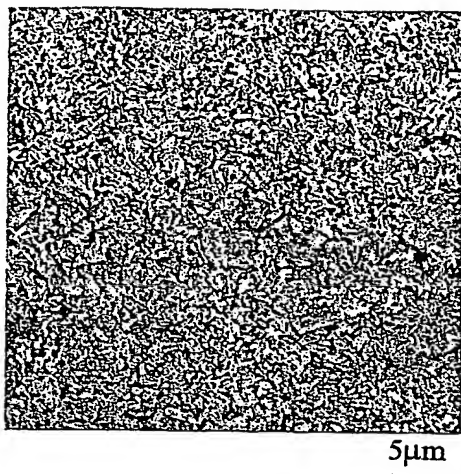


Figure 30

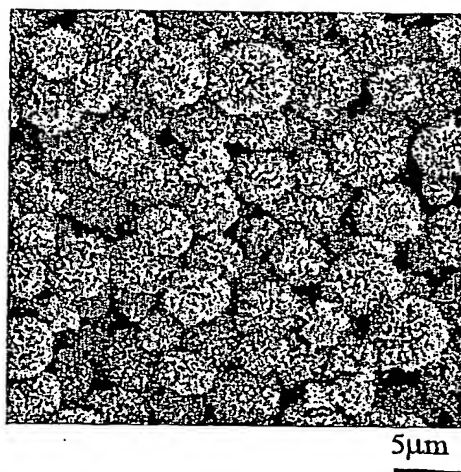


Figure 31

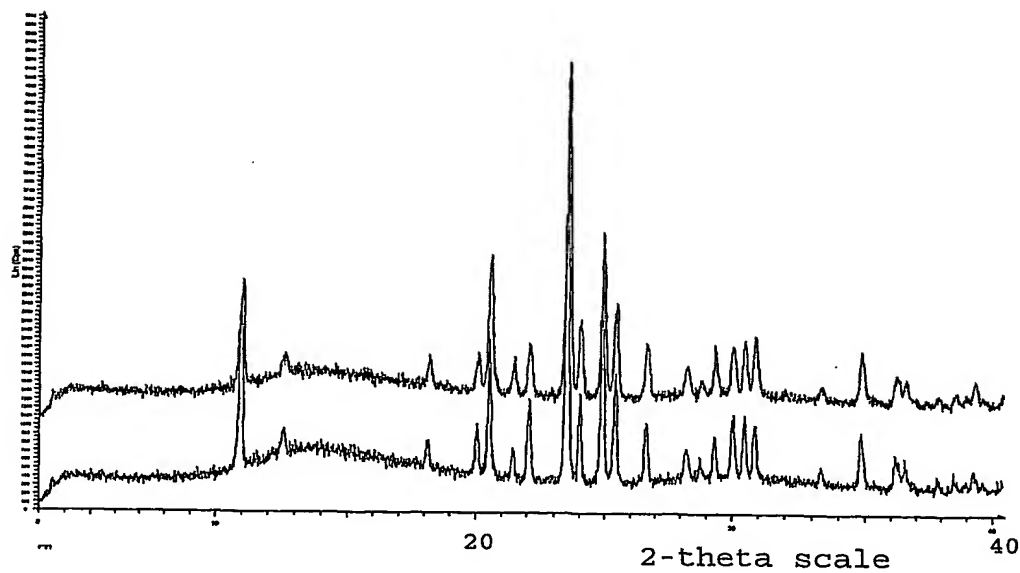


Figure 32

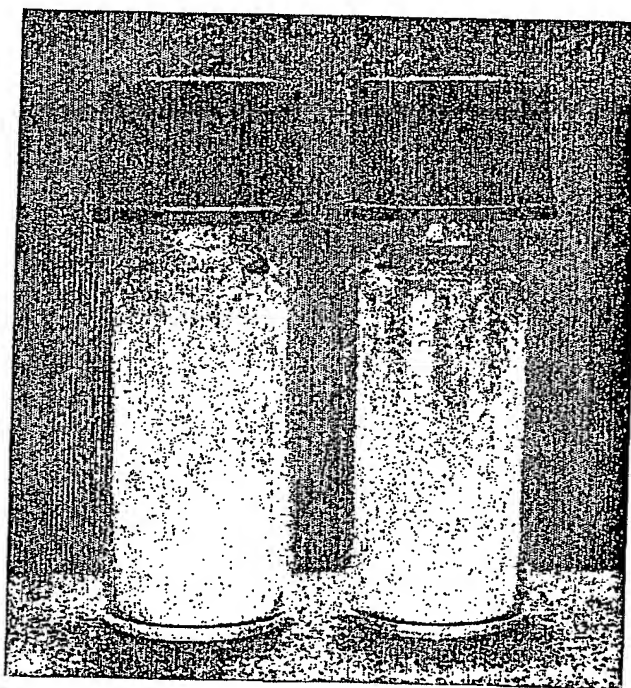


Figure 33